Amendments to the Specification:

Please amend the specification as follows:

At page 31, lines 8-27, replace the paragraph with the following amended paragraph:

As described, the mechanical stripping apparatus includes two sets of vertically opening and closing cutting blades 124, 130 adapted for vertical, then horizontal movement either independently or simultaneously. A pair of clamps 120, 122, on either side of the cutting blades 124, 130, holds a strippable filament in a ~~taught~~ taut condition during the stripping process. Another embodiment of a mechanical stripping apparatus alters the angle of the incision during the cutting process to modify the shape of a tapered transition 108. As the blades 124, 130 close towards the coating 100, 102 around a clamped fiber 20 an angled surface or biasing cam surface deflects the path of the blades to a prescribed entry angle into the coating 102 so as to provide a controlled tapered transition. This produces an intentionally angled cut by moving the blades 124, 130 diagonally into the coating. Any change in the angle of the cam surface produces a corresponding change in the angle of a tapered transition 108 to allow consistently reproducible contours of a coating 100, 102 abutting either side of a bare portion of an optical fiber. Suitable selection of the cam angle produces tapered transitions 108 having contours and dimensions facilitating essentially defect-free recoating of bare optical fiber portions. Successful mechanical stripping to provide a tapered transition may proceed under ambient conditions, as indicated previously. With some buffers, however, the modulus of the buffer resin is in a range that complicates the formation of a tapered transition. In such cases, it may be necessary to soften the resin by heat or chemical action before attempting the mechanical stripping process to produce the desired tapered transition.

At page 41, line 29, to page 42, line 11, replace the paragraph with the following amended paragraph:

Figure 27 shows the result of gripping a filament 20 between a floating jaw assembly 295 and a lower jaw 292. As the floating jaw assembly 295 moves towards the lower jaw 292, the rectangular groove 298 of the filament gripper ~~292, 294~~ 272, 274 makes contact with a filament positioned in the V-shaped channel 296 of the lower jaw 292. As contact occurs, the filament clasp 300 may adjust slightly to apply gripping force uniformly to the filament 20, without

disturbing it. Adjustment of the filament clasp 300 relies upon its independent movement due to the angular compensator 304 that separates it from the support flange 302. A preferred angular compensator 304 according to the present invention comprises a spherical element that prevents contact between the filament clasp 300 and the support flange 302. Preferably the angular compensator 304 seats between a substantially conical shaped depressed portion 301 in the fiber clasp 300 and a substantially conical recess 303 in the support flange 302. The angular compensator 304 maintains separation of the support flange 302 from the filament clasp 300 to allow them to move independently. Also, the spherical structure of the angular compensator 304 allows effective change of angle around the perimeter of the filament clasp 300.

At page 50, lines 1-16, replace the paragraph with the following amended paragraph:

The ultrasonic atomization process generates volumes of coating composition that are extremely small, in the range from about 0.001 ml/min to about 0.010 ml/min using a 2.0cc glass syringe available from Popper & Sons. The flow rate for dispensing a substantially non-directional cloud of droplets less than 50 microns in diameter depends upon the speed at which the fiber is scanned in front of the atomizer head. A low velocity flow of nitrogen, or other inert carrying gas directs the cloud of ultrafine droplets of recoating composition towards a target surface. The low cloud volume and extremely small droplet size cause the formation of a textured discontinuous covering of the fiber surface. Although coatings are low enough in viscosity for spray application, preferred coating compositions exhibit minimal flow, after application, prior to coating. Flow and droplet agglomeration is further limited because the recoating composition, immediately after application, undergoes exposure to curing radiation from the radiation source 324, 328. Repeated application of recoating composition builds up a protective coating over a bared optical fiber portion 250. A recoated optical fiber preferably has a relatively smooth ~~appearance~~ bubble-free appearance. This requirement guides the selection of materials used to prepare recoating compositions according to the present invention.

At page 55, lines 22-31, replace the paragraph with the following amended paragraph:

A process for manufacturing an optical fiber Bragg grating has been described to show how a compact filament organizer 10 may be used to handle and transport optical fibers 20 between various types of processing equipment. Each piece of processing equipment may

include a pair of mounting pins for alignment and insertion in through holes 80 of a filament organizer 10 for correct positioning of a central portion of an optical fiber [[02]] 20 relative to the selected piece of apparatus. Such easy positioning also facilitates automation of at least parts of the Bragg grating manufacturing process unlike previous similar processes that rely upon operator skill for correct fiber positioning. It will be appreciated that engagement between mounting pins and through holes is only one of a number of methods for aligning an optical fiber for processing.

Amendments to the Drawings

The attached sheet of drawings include changes to Fig. 23, to replace the original sheet 12/15.

In Fig. 23, the reference numeral for the extending guide rod has been corrected from 228 to 288.

Attachment: Replacement Sheet